



Activities in North Dakota

ATSDR in Partnership with North Dakota

The Agency for Toxic Substances and Disease Registry (ATSDR) is the lead public health agency responsible for implementing the health-related provisions of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). ATSDR is an Atlanta-based federal agency with 400 employees. ATSDR's annual budget for 2002 is \$78 million. ATSDR is responsible for assessing the presence and nature of health hazards at specific Superfund sites, helping to prevent or reduce further exposure and illnesses that result, and expanding the knowledge base about the health effects of exposure to hazardous substances.

ATSDR works closely with state agencies to carry out its mission of preventing exposure to contaminants at hazardous waste sites and preventing adverse health effects. ATSDR provides funding and technical assistance for states to identify and evaluate environmental health threats to communities. These resources enable state and local health departments to further investigate environmental health concerns and educate communities. From 1999 through 2001, ATSDR awarded more than **\$173,333** in direct funds and services for public health assessment-related activities to the state of **North Dakota**. In addition to direct funds and services, ATSDR staff provides technical and administrative guidance for state-conducted site activities.

ATSDR Site-Specific Activities

Public Health Assessment-Related Activities

One of the agency's important mandates is to conduct **public health assessments** of all National Priorities List (NPL) sites and of other sites where there might be a significant threat to public health. There have been **two** sites designated to the NPL in **North Dakota**.

A **public health assessment** provides a written, comprehensive evaluation of available data and information on the release of hazardous substances into the environment in a specific geographic area. Such releases are assessed for current or future impact on public health. The ATSDR staff, in conjunction with public health and environmental officials from **North Dakota**, has conducted **two** health assessments in the state. The following is an example of a public health assessment conducted in **North Dakota**.

Old Minot Landfill – Located near the city of **Minot**, the 45-acre Old Minot Landfill sits between two ravines, with surface water runoff that flows toward the Souris River. From 1946 to 1971, it served as a municipal landfill and received wastes from several industrial generators in the vicinity. The site was believed to contain oils, battery casings, calcium carbide, lime sludges, and wastes from nearby missile construction sites. Although the community did not express any health concerns to ATSDR or other health officials, the 1st District Health Unit in Minot was aware of problems associated with gas releases from the site and contamination present in the drainage ditch passing through the site.

In 1989, ATSDR staff conducted a site visit, and a subsequent public health assessment was released in 1991. Based on the available sampling data, the site was considered a potential public health concern, because people may be exposed to hazardous substances in surface water and reportedly in groundwater. ATSDR recommended that additional environmental sampling be conducted to better characterize the site. ATSDR also recommended continual monitoring of municipal water sources to maintain public safety and prevent exposure to potentially harmful substances.

A **health consultation** is a written or oral response from ATSDR to a specific request for information about health risks related to a specific site, chemical release, or hazardous material. It is a more limited response than a public health assessment. To date, **three** documented health consultations have been conducted at **three** sites in **North Dakota**. Below are examples of health consultations conducted in the state.

Manvel Pesticides – This 40-acre area, located in the town of **Manvel**, in **Grand Forks County** was used as a private residential property from 1989 until 1996. The previous owner operated an aerial crop spraying business from 1960 through the early 1980s. The owner of the business reportedly disposed of pesticide containers and other trash in several trenches and pits on the property. In 1996, the **North Dakota Department of Health (NDDH)** collected soil samples from various locations on the site and dust samples from the private residence. In 1997, the U.S. Environmental Protection Agency (EPA) issued a Request for a Time Critical Removal Action to excavate suspected burial areas and contaminated soil.

An occupational medicine physician requested that ATSDR perform a health consultation for the family that resided at this site. ATSDR prepared a health consultation in 1998. Based on available information, ATSDR concluded that there were minimal, if any, long-term health risks for the family due to their residence at the site. Biomonitoring tests performed while the family was living at the site did not show evidence of increased exposure. ATSDR did not recommend any further biological tests to assess possible exposure-related health effects.

Standing Rock Indian Reservation – ATSDR was consulted regarding two U.S. Bureau of Indian Affairs (BIA) schools and a BIA administration building located on the Standing Rock Indian Reservation in **Sioux County**. The buildings were contaminated with polychlorinated biphenyls (PCBs) caused by oils dripping from fluorescent light ballasts. After the buildings were remediated, tribal members, tribal government representatives, and BIA workers were concerned about the safety of school children, school staff, and BIA personnel who were to reoccupy the buildings. In 1998, ATSDR was requested to determine whether any remaining PCB or dioxin contamination was cause for concern.

ATSDR studied the sampling methods, locations, and results in the remediation reports on the BIA administration building, elementary school and high school. No detectable quantities of PCBs were found in the post-remedial sampling. All of the lights in these buildings that contained PCBs were replaced, leaving no possibility for future exposure.

Due to concerns about dioxin contamination, sampling was conducted on walls, ceilings, and ceiling tiles. Any ceiling tiles found to contain dioxins were replaced. Walls and ceilings had very small amounts of dioxins. Although these amounts were not enough to be of concern, the walls were washed as a precautionary measure. ATSDR determined that school children, school staff, and BIA personnel were not expected to experience any adverse health effects from PCB and possible dioxin contamination.

Educating Health Professionals and Community Activities

In March 2001, physicians representing the North Dakota chapter of the American Academy of Pediatrics participated in the groundbreaking session of the National Workshop to Establish an Environmental Safety Net for Children. The workshop was a joint venture between ATSDR and the Committee of Environmental Health of the American Academy of Pediatrics.

Through a national cooperative agreement with the Migrant Clinicians Network, ATSDR provides assistance in the development, implementation, and evaluation of environmental health education programs for health care providers working with migrant and seasonal farm workers. The Migrant Clinicians Network, the second largest clinical network in the nation, brings together clinicians from various professions under one umbrella to meet the needs of migrant and seasonal farm workers. The Dakota Association of Community Health Centers, **Bismarck**, and the Pembina Clinic Association, **Pembina**, are local members of the Migrant Clinicians Network.

The North Dakota Environmental Health Association, with more than 70 members from the private sector as well as city, county, state and tribal organizations, benefits from an ATSDR national cooperative agreement with the National Environmental Health Association. The cooperative agreement provides for the evaluation, planning, design and implementation of an environmental health education program that responds to the significant threat of chemical terrorism. One of the agreement's goals is to conduct regional/national training and education workshops.

Toxicological Profiles

ATSDR develops toxicological profiles that describe health effects, environmental characteristics, and other information, for substances found at NPL sites. These profiles describe pathways of human exposure and the behavior of toxic substances in environmental media such as air, soil, and water. Since 1995, more than **144** of these profiles have been provided to requesters, including representatives of federal, state, and local health and environmental departments; academic institutions; private industries; and nonprofit organizations in **North Dakota**.

If you would like additional information, contact ATSDR toll-free at (888) 42ATSDR, that is, (888) 422-8737 or visit the homepage at <http://www.atsdr.cdc.gov>

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